evaluation of site conditions so as to improve construction design, Stricter contracting procedures and steps to involve local communities and farmers to ensures adherence to quality standards by contractors.

Linking of surplus and scarcity zones

3520. SHRI S. MADHAVAN: Will the Minister of WATER RESOURCES be pleased to refer to the answer to Starred Question 135 given in the Rajya Sabha on the 29th November, 1991 and state:

(a) whether the water balance study report of the Achankovil basin was sent to the Kerala Government and the comments of the State Government were received and whether the Technical Advisory Committee had considered the report and the comments;

(b) if so, what are the steps taken to implement the report of the Technical Advisory Committee;

(c) what is the annual surplus in this basin at 75 per cent annual dependabiilty in respect of surface water;

(d) whether the comments of the State Government on the feasibility report on the water transfer links of Godavari-Krishna and the west flowing rivers of Kerala-Vaigai were received and considered by the Technical Advisory Committee and if so, what are the details of the surplus waters available in these basins; and

(e) what steps are being taken to divert the surplus water to the drought prone areas?

THE MINISTER OF WATER RESOURCES (SHRI VIDYA CHARAN SHUKLA): (a) Yes, Sir. General comments of Kerala Government alongwith clarifications of National Water Development Agency were discussed in the 14th meeting of Technical Advisory Committee on 11th October, 1990.

(b) Based on recommendation of the Technical Advisory Committee meeting, the report has been revised and circulated again to Kerala.

(c) The annual surplus in Achankovil basin at 75 per cent dependability is estimated at 1515 million cubic metre.

(d) The comments of Government of Andhra Pradesh has been received on the Godavari (Polavaram)—Krishna (Vijayawada) Link in July, 1991. This alongwith clarifications of National Water Development Agency will be discussed in the ensuing 16th Technical Advisory Committee meeting of National Water Development Agency. The comments from Temil Nadu and clarifications of National Water Development Agency on Pamba-Achankovil-Vaigai link (PAV) were discussed in the 15th meeting of Technical Advisory Committee held in June, 1991. The comments of Kerala are awaited on Pamba-Achankovil-Vaigai Link. The surplus in Godavari basin has been estimated at 15020 million cubic metre, subject to revision based on crop water requirement in respect of the proposed Polavaram and Inchampalli Projects. Krishna and Vaigai basins are deficit basins.

(e) For preparation of a detailed feasibility report, the field investigations in respect of Pamba-Achankovil-Vaigai Link has been taken up during the current year and the optimisation studies in respect of this line are in progress. Preliminary feasibility studies in respect of other links to divert surplus water to drought prone areas are also in progress.

Construction of DAMS with Japanese Assistance

3521. SHRI JAGADISH JANI: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether it is a fact that some major dams are proposed to be constructed in the country with Japanese aid and assistance;

(b) if so, the details of the dams proposed to be constructed with Japanese aid;

(c) the estimated cost of the dams projects and location thereof; and

(d) the steps taken in the matter?

THE MINISTER OF WATER RESOURCES (SHRI VIDYA CHARAN SHUKLA): (a) to (d) Yes, Sir. Kosi High Dam project and Barak Dam Project (also known as Tipaimukh Dam Project) have been posed for assistance to Global Infrastructure Fund, Japan. The sailent feautres of the two projects are as under:—

The Kosi High Dam Project envisages construction of a 269 metre high dam across the river Kosi approximately 1·6 km upstream of Barakshetra and barrage 8 km downstream of dam near Chatra village in Nepal. The project will provide hydro-power, irrigation and flood control benefits to both India and Nepal Estimated cost of the project at 1981 price level is Rs. 40.74 crores.

The Barak Dam Project envisages construction of 161 m. high, 380 m. long rockfill dam on the river Barak and a barrage near Fulertal about 100 kms. downstream of Tipaimukh Dam. The project would significantly reduce flooding and drainage problem in the down stream low-lying areas of India and Bangladesh. At 1988 price level, the Barak dam and the barrage near Fulertal are expected to cost reupees 1316 crores and 270 crores respectively.

Irrigation potential achieved during each five year Plan period..

3522. SHRI KAMAL MORARKA: Will the Minister of WATER RESOURCES be pleased to state:

(a) the details of investment made and irrigation potential created during the each five year plan period;

(b) the extent of utilisation of potential created;

(c) the cumulative gap between utilisation of potential till the end of Seventh Plan period; and

(d) the schemes launched to bridge the gap and the success achieved so far?

THE MINISTER OF WATER RESOURCES (SHRI VIDYA CHARAN SHUKLA): (a) and (b) Details are as under.—

Plan	Expenditure on irrigation sector (Rs. in crores)	Potential	
		Creation	Utilisation (in million hectares)
First Plan	366	3·6	2·4
Second Plan	522	2·9	2·8
Third Plan	909	4·5	4·4
Annual Plan (1966-69)	760	3·5	3·6
Fourth Plan	1750	7·1	6·4
Fifth Plan	3192	7·8	6·3
Annual Plan (1978-80)	2715	4·6	4·1
Sixth Plan	11058	10·93	7·98
Seventh Plan (outlay)	16032	12·21	10·84